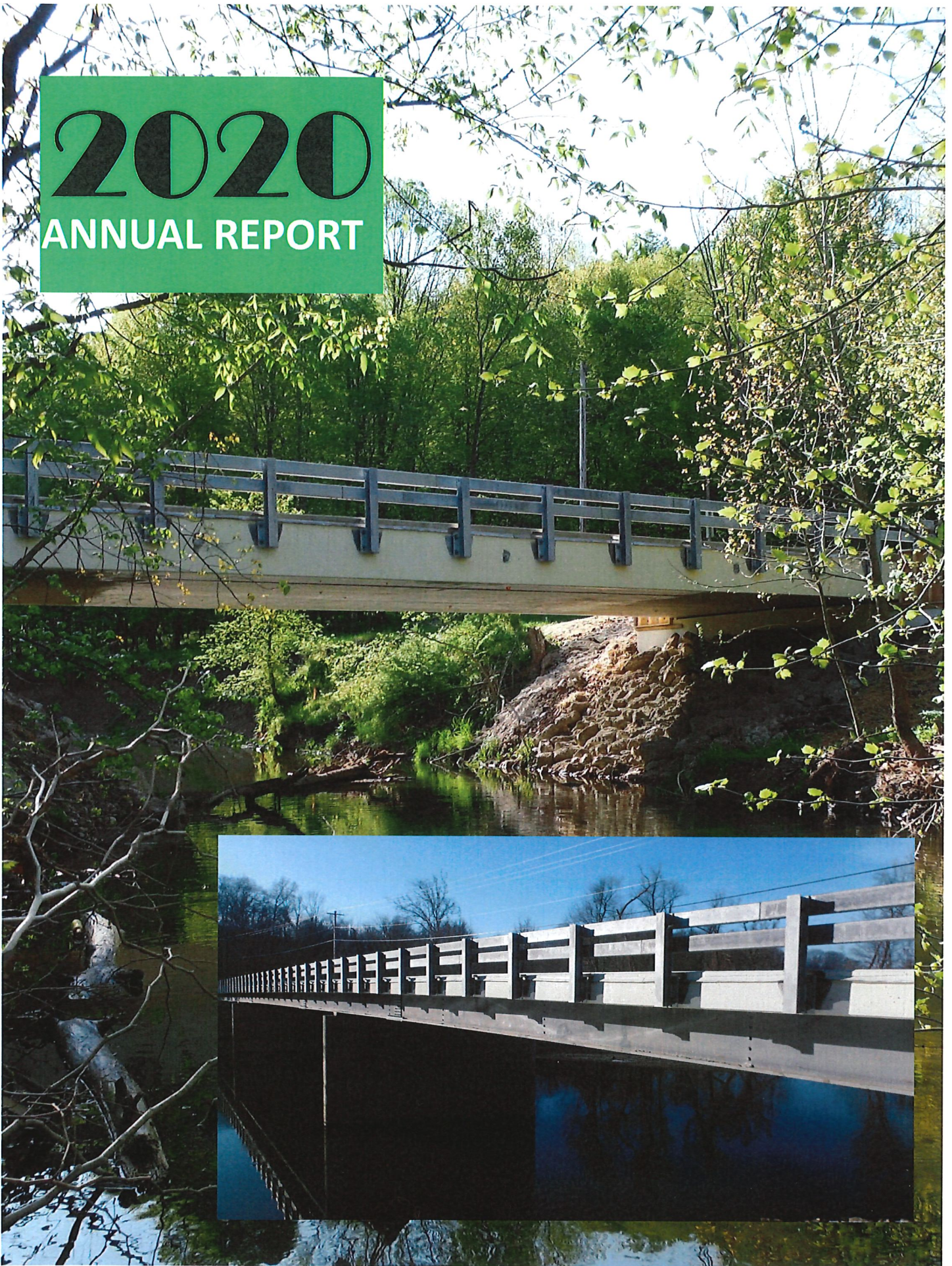


# 2020

## ANNUAL REPORT





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In accordance with ORC 5543.02, I respectfully Submit this Licking County Engineer's Office (LCEO) 2020 annual report to the Board of Licking County Commissioners. This document outlines the general condition of the county roads, bridges, and culverts. This report provides a brief description of LECO's revenue and expenses as well as documenting and memorializing the accomplishments of the hard-working men and women of this office.

Respectfully,

*Jared Knerr* 5/17/2021

Jared Knerr, P.E., P.S.

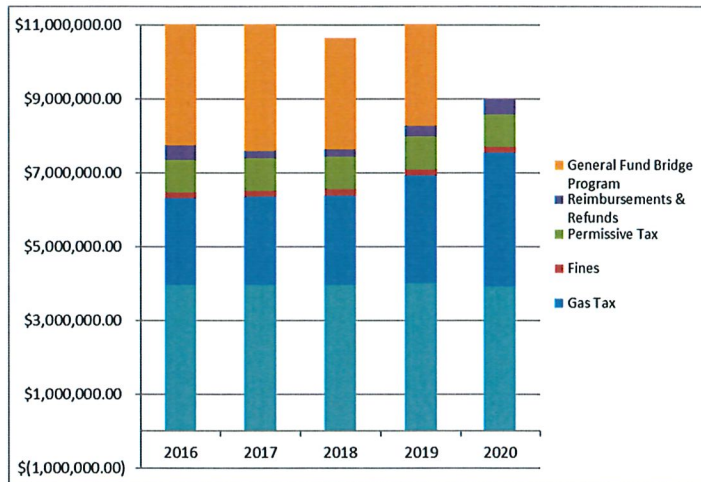




# REVENUE AND EXPENSES

## Revenue

	2016	2017	2018	2019	2020
Motor Vehicle Tax	\$ 3,968,841.27	\$ 3,962,461.66	\$ 3,953,218.05	\$ 3,993,370.13	\$ 3,919,496.45
Gas Tax	\$ 2,338,615.75	\$ 2,389,284.77	\$ 2,417,403.95	\$ 2,939,200.28	\$ 3,614,207.26
Fines	\$ 158,143.17	\$ 155,721.42	\$ 177,125.26	\$ 153,458.34	\$ 155,788.90
Permissive Tax	\$ 867,708.65	\$ 876,236.09	\$ 877,690.58	\$ 888,551.49	\$ 880,809.00
Reimbursements & Refunds	\$ 396,851.88	\$ 192,916.49	\$ 210,228.74	\$ 301,484.32	\$ 422,941.04
<i>Sub totals</i>	\$ 7,730,160.72	\$ 7,576,620.43	\$ 7,635,666.58	\$ 8,276,064.56	\$ 8,993,242.65
General Fund Bridge Program	\$ 4,060,780.00	\$ 4,230,713.00	\$ 3,000,000.00	\$ 3,000,000.00	\$ -
<b>Grand Totals</b>	<b>\$ 11,790,940.72</b>	<b>\$ 11,807,333.43</b>	<b>\$ 10,635,666.58</b>	<b>\$ 11,276,064.56</b>	<b>\$ 8,993,242.65</b>

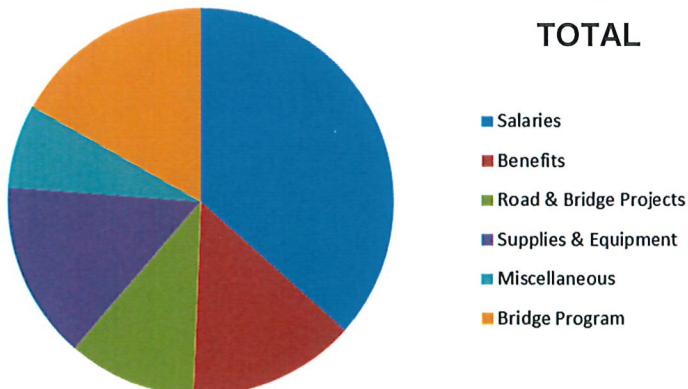


Revenue & Expenses

## Expenses

### 2020 EXPENDITURE

Salaries	\$ 2,933,144.31
Benefits	\$ 1,120,854.22
Road & Bridge Projects	\$ 858,583.92
Supplies & Equipment	\$ 1,193,654.51
Miscellaneous	\$ 558,699.07
Bridge Program	\$ 1,348,884.00
<b>TOTAL</b>	<b>\$ 8,013,820.03</b>





# BRIDGE PROGRAM

## Bridge Program

The Licking County Engineer is responsible for 433 bridges with a span of 10' or greater on the County and Township Road systems. Bridge deficiencies are identified by low scores on the General Appraisal (GA) or if the bridge requires a reduction of the legal load-carrying capacity. The GA is a 0-9 rating scale developed by the Federal Highway Administration. Any bridge with a GA of 4 or less on the Licking County road system is considered to be in poor or worse condition. On 11/15/2020 we had 52 bridges with a GA of 4 or less. Load reductions are determined through a careful and tedious numerical model that serves as an analytical tool for evaluating the bridge under various standard loading conditions. If the bridge has deteriorated to the point where it can no longer carry legal loads allowed by the State of Ohio, then it must be posted for reduced loads. On 12/10/2020 we had 36 bridges posted (including one closed for imminent failure). Please note that some bridges may have no deterioration but still require load postings due the fact that the heavier truck designs of the present day did not exist when the bridge was designed.

Road	SFN	Days Closed	Cost	Type
FAL-T0228-0450 McKee Hill	4530977	291 / 76 constr. time	\$ 376,513.55	Truss re-hab
BEN-T0066-0050 Douglas Lane	4534557	50	\$ 302,190.25	Box Beam
NWT-T0121-0060 Welsh Hills	4532620	135	\$ 439,980.15	3-span slab
UNI-T0141-0430 Gale Rd	4533772	18	\$ 99,294.43	Box Culvert
BEN-C0010-0395 Appleton Rd	4534816	74	\$ 94,305.50	Steel beam



## Bennington

BEN-C0010-0395 (Appleton Rd)



BEN-T0066-0050 (Douglas Lane)



## Fallsbury Township

LIC-T0228-0450 (McKee Hill)





## Newton Township

NWT- T0121-0060 (Welsh Hills )



## Union Township

UNI- T0141-0430 ( Gale Rd)

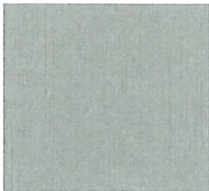




# ROADWAY RESURFACING & STRIPING

## Paving & Chip Seal

The Licking County Engineer is responsible for 417.6 miles of County roads. The roads selected for re-surfacing were determined based on our Pavement Condition Rating (PCR). This is a system to measure the defects of a roadway with a value from 0 to 30. The PCR consists of 6 different measurable defects with each having a value of 0 to 5.

Road	Miles	Cost	Contract/Force Account
Licking Valley Rd	5.56		Contract
Jug Street Rd	1.16		Contract
Swans Rd	3.24		Contract
Outville Rd	2.8		Contract
<b>Total:</b>	<b>12.76</b>	<b>\$1,164,786.51</b>	

## Striping

Licking County stripes a portion of the system annually to maintain lane delineation and reflectivity of the roadway markings which improves visibility at night and during wet conditions. In 2020 there was no additional striping was done.





# CULVERT PROGRAM

A county-wide culvert inspection and inventory effort has revealed the need for increased emphasis on this critical but often hidden element of the county's roadway infrastructure. With limited funding, the challenge is to decide which culverts to replace first. Factors that are considered when replacing a culvert are risk of failure, pavement re-surfacing schedule, traffic volumes, and cost.

## Replacements

Bennington Chapel-RD	1	\$2,911.63
Cedar Run-RD	1	\$14,410.82
Clover Valley-RD	1	\$3,868.03
Duncan Plains-RD	1	\$2,503.88
Frampton-RD	1	\$3,880.59
Gratiot-RD	1	\$9,992.53
Harvard-PL	1	\$1,895.86
Horns Hill-RD	1	\$613.06
Jug Street-RD	1	\$7,319.23
Lakeshore-DR	5	\$13,842.62
Licking Valley-RD	1	\$358.34
Morse-RD	1	\$3,149.94
Raccoon Valley-RD	1	\$2,562.61
Reynolds-RD	1	\$2,911.86
Swamp-RD	1	\$6,149.16
Swans-RD	1	\$2,876.50
Westley Chapel-RD	1	\$3,503.23
York-RD	2	\$5,820.20

**Locations: 18**

**Pipes: 23**

**Grand Total \$88,570.09**



# GUARDRAIL & MOWING PROGRAM

## Guardrail

The Guardrail Program is funded through the U. S. Department of Transportation Federal Highway Administration. We received the maximum funding of \$300,000.00.

## Mowing

The Contract Mowing Program includes mowing along the pavement edge, including guardrail. All roads are mowed four times per calendar year, starting in May and ending the first part of November. The first cut is mowed up to 6 feet from the edge of the road with the second, third, and fourth cuts being mowed up to 12 feet from the edge of the road.

## Brush Cutting

Crews worked throughout the year to cut back brush along the right-of-way.

Guardrail & Mowing





# GENERAL MAINTENANCE, FACILITIES & EQUIPMENT



## Snow/Ice Control

- 1663 Tons of Salt
- 33,046 Gallons of Brine & Beet Heet
- 904 Regular Hours
- 1040 Overtime Hours

## Asphalt Patching

- 3864 Tons of Hot/Cold Mix

## Sign Replacement

- 860 New Signs
- 231 Replaced Signs

## Equipment Purchased

UNIT / MAKE / TYPE			UNIT COST	TRADE IN UNIT	TOTAL PURCHASE
100 - GMC - PICKUP			\$ 29,171.45	\$ 18,000.00	\$ 11,171.45
102 - FORD - PICKUP			\$ 31,058.00	\$ 2,250.00	\$ 28,808.00
103 - FORD - PICK UP			\$ 31,058.00	\$ 2,250.00	\$ 28,808.00
104 - FORD - DUMP TRUCK			\$ 59,346.00	\$ 1,950.00	\$ 57,396.00
105 - FORD - DUMP TRUCK			\$ 59,346.00	\$ 2,750.00	\$ 56,596.00
106 - FORD - DUMP TRUCK			\$ 59,346.00	\$ 35,000.00	\$ 24,346.00
107 - FORD - DUMP TRUCK			\$ 59,346.00	\$ 35,000.00	\$ 24,346.00
M - 4 JOHN DEERE 6300			\$ 35,000.00	\$ -	\$ 35,000.00
SK230 KOBELCO TRACKHOE			\$ 190,000.00	\$ 103,050.00	\$ 86,950.00
ANTI ICING EQUIPMENT			\$ 3,940.00		\$ 3,940.00
ANTI ICING EQUIPMENT			\$ 3,940.00		\$ 3,940.00
ANTI ICING EQUIPMENT			\$ 3,940.00		\$ 3,940.00
ANTI ICING EQUIPMENT			\$ 3,940.00		\$ 3,940.00
ANTI ICING EQUIPMENT			\$ 3,940.00		\$ 3,940.00
TOTAL			\$ 573,371.45	\$ 200,250.00	\$ 373,121.45